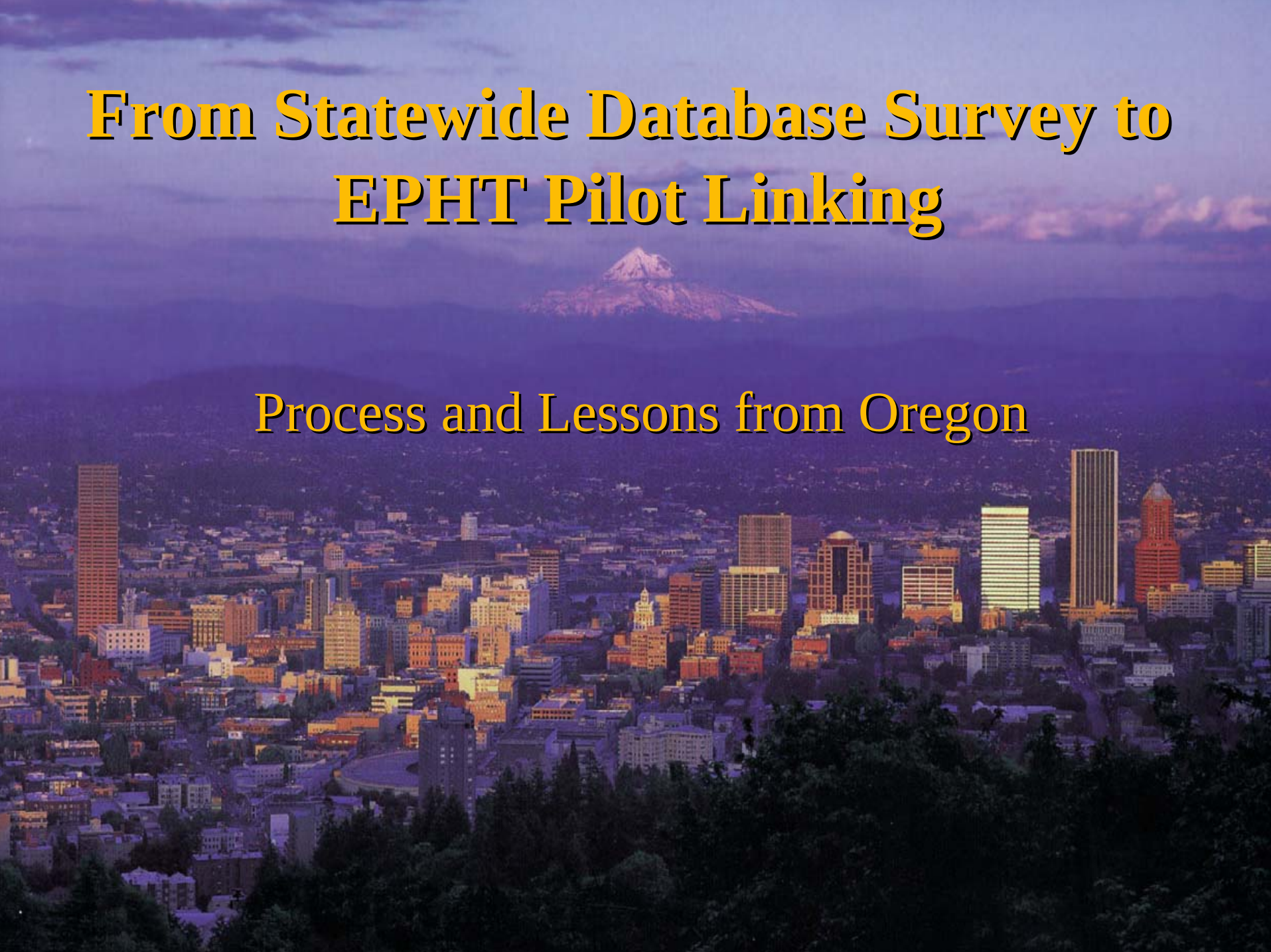


# From Statewide Database Survey to EPHT Pilot Linking

## Process and Lessons from Oregon

# From Statewide Database Survey to EPHT Pilot Linking: Overview

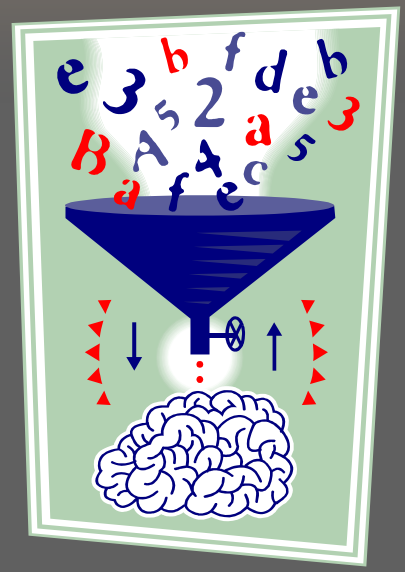
GOAL: The Funnel

The process, policy, and methods of bringing diverse datasets together in a meaningful way

# Pilot Project Background

- Database Inventory
- Convened Technical Team
- Initial Pilot Project
  - Groundwater Nitrate and Cancer
- Advisory Committee and Planning Consortium Comments
- Selected Pilot Project
  - Air Quality and Asthma and Cardiovascular Events

# Database Inventory



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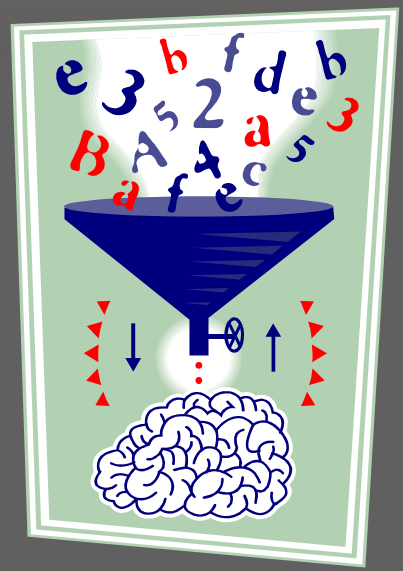
# Database Inventory



Initial proposal for the Cooperative Agreement identified 33 databases, many of them federal

# Database Inventory

- Developed questionnaire based on other EPHT states
- Contracted for info gathering on state and local databases
- Contractor contacted 104 people in 63 agencies/orgs.
- Contractor produced inventory of information on 57 databases

# Database Inventory

- The database list was reformated and categorized by type then presented to the Planning Consortium
- The Planning Consortium identified 70 more databases
- Total at the mouth of the funnel = 125 databases

# Database Inventory

- Database inventory categorized by:
  - Type of data (health, environmental hazard, exposure, or a combination)
  - Data collection (mandatory or not)
  - Time period of collection
  - Willingness of owner to share data with EPHT

# Technical Team

- Database Inventory
- Convened Technical Team
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# Technical Team

The Technical Team was drawn from the Planning Consortium membership:

- Health and Environment Database Owners
- Information Technology Specialists
- Health Care Providers and Researchers

# Technical Team

Training provided to members of the Technical Team:

- Purpose of the team
- Specific tasks to be accomplished

# Technical Team

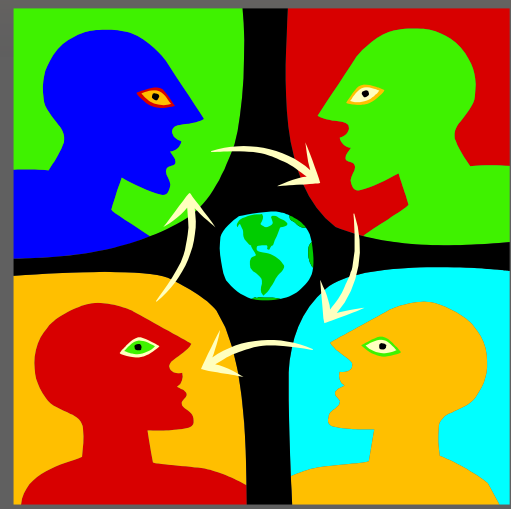
Three tasks were identified:

1. Evaluate the Database Inventory and propose topics for the Pilot Project
2. Evaluate IT Public Health Systems
3. Describe and assess how state and local IT organizations will collaborate

# Technical Team

- Database Inventory Evaluation
  - Criteria given to technical team
    - Mandatory; on-going
    - Regional or Statewide
  - Criteria developed by technical team
    - Important to a Region
    - Good quality health and environmental data

# Pilot Project Initial Plan



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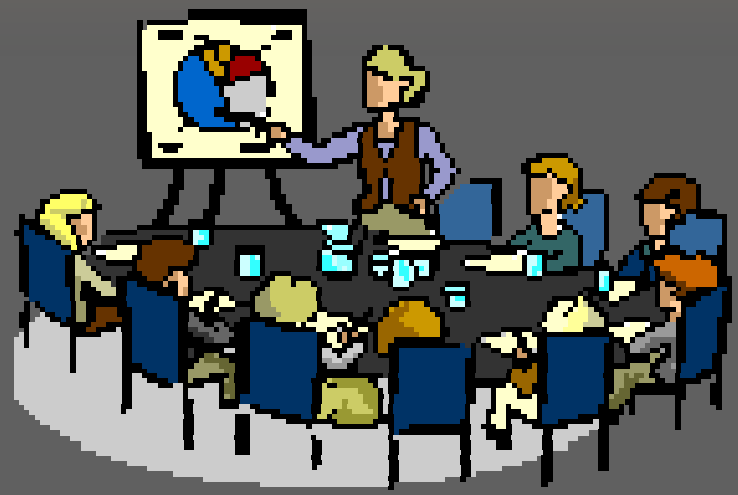
# Initial Pilot Project

- The Technical Team evaluated and considered inventory databases
- Proposed a focus on groundwater nitrates and cancer
- “The Plan” was brought to the Advisory Committee

# Advisory and Planning Consortium Comments



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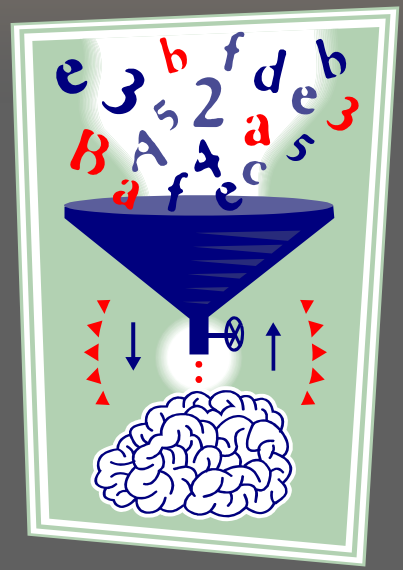
# Advisory Consortium Comments

- Advisory Committee recommendations:
  - Consider data with stronger scientific links between the environmental hazard and the health outcome
  - Pilot Project needs to fit with state priorities
  - Create foundation for statewide capacity building

# Planning Consortium Comments



- The Planning Consortium reviewed “The Plan” and Advisory Committee’s comments
- Suggested the Technical Team select a new focus

# Current Plan

- Database Inventory
- Convened Technical Team
- Initial Pilot Project
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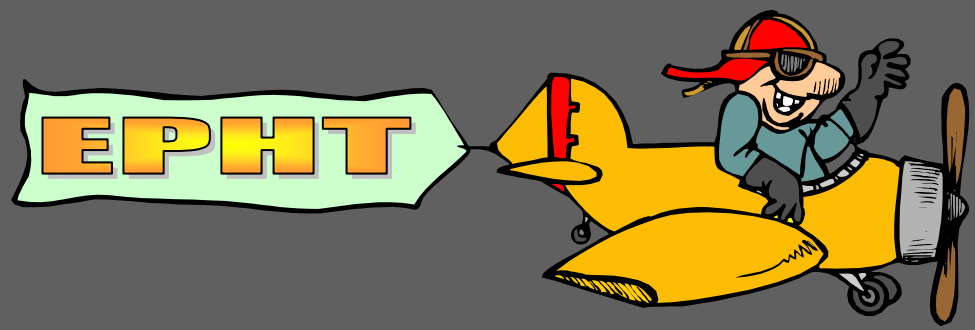
- Advisory Committee and Planning Consortium Comments
- Selected Pilot Project
  - Air Quality and Asthma/Cardiovascular

# Selected Pilot Project

- Technical Team reconvened and reconsider data options
- Reviewed input from the Advisory Committee and Planning Consortium
- Considered new information from the PHASE project
- Technical Team selected asthma exacerbations, cardiovascular events, and air quality data as topics of study

# Pilot Project Process

- Develop Relationship with Data Partners
- Develop Data Sharing Agreements
- Develop Data Receiving Systems
- Data Processing
  - Geocoding
  - Quality Assurance
  - Post Coding of Data



# Pilot Project Data

- Two Environmental Data Sources
  - Air Quality
  - Meteorological Data
- Two Health Conditions
  - Asthma exacerbations
  - Cardiovascular events

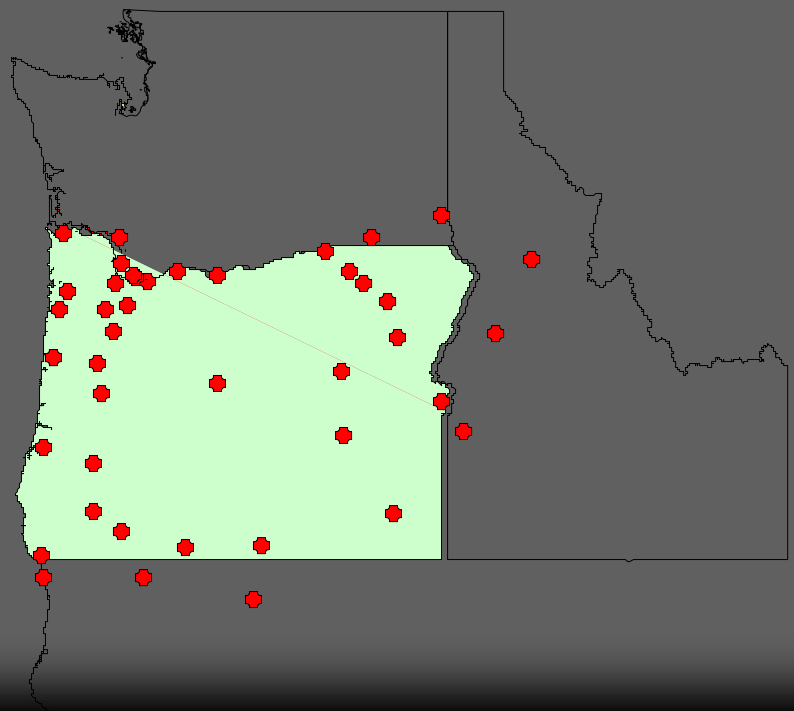
# Pilot Project Data: Environmental

- Oregon Department of Environmental Quality

- Particulate Matter
  - $PM_{2.5}$
  - $PM_{10}$
  - Nephelometer (light scatter surrogate for $PM_{2.5}$ and $PM_{10}$)

# Pilot Project Data: Environmental

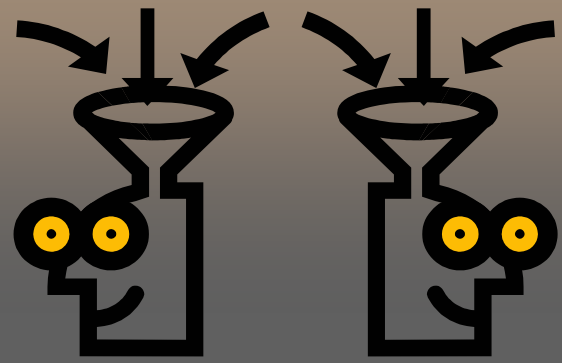
- Daily average weather data from 33 sites in Oregon and 9 from surrounding states
  - Humidity
  - Temperature
  - Precipitation
  - Wind Speed and Direction



# Pilot Project Data: Health Outcomes

- Oregon Health & Sciences University Emergency Department Visits
  - Asthma: ICD9 493.XX
  - Cardiovascular: ICD9 390.XX – 459.XX
- Medicaid Management Information System (MMIS)
  - Asthma: ICD9 493.XX
    - Prescriptions Filled for
      - Flovent 220
      - Ventolin 90
  - Cardiovascular: ICD9 390.XX – 459.XX

# Lessons Learned



- Using a combination of health and environmental partners in decision-making gets the best results
- The process is iterative and nonlinear
- Many databases initially identified were of little use
- Mandatory reporting provides better data quality and access
- Participation by EPHT stakeholders and partner agencies was key to the success of “THE FUNNEL”